

RESPONSE UNDER 37 C.F.R. § 1.116  
U.S. Application No.: 09/832,830

Attorney Docket: Q63809

In response to Applicant's Amendment of September 15, 2003, the Examiner has withdrawn the prior art rejections set forth in the previous Office Action of May 20, 2003. However, the Examiner now rejects claims 1, 2, 8, 9, 12, 17-21, 23, and 24 under 35 U.S.C. 102(b) as being anticipated by newly cited Lichy (U.S. Patent 6,231,404). The Examiner rejects claims 10 and 11 under 35 U.S.C. 103(a) as being unpatentable over Lichy.

Applicant traverses the prior art rejections.

**Claim Rejection - 35 USC 102**

In rejecting claims 1, 2, 8, 9, 12, 17-21, 23, and 24, the grounds of rejection state:

Lichy discloses an interconnection (1,7) comprising a conductive core (13) including a metal conductor (13) with, at each end thereof, an electrical connector (32,5), and a flexible tube (31) with at least, coaxially starting from the center: a semi conductive layer (35), an insulating layer (14) made of elastomeric material and covering the whole conductive core (13) and passing a medium voltage (Column 3, Lines 47-50) through the interconnection (1,7). The method limitations are deemed inherent. See Fig. 1a.

Office Action at pages 2-3 (emphasis added). Applicant respectfully disagrees.

In order to reject a claim as being anticipated by a reference, the grounds of rejection must establish that the reference discloses every element of the claim.

Independent claim 1 of the present invention recites, in part, a method to provide a medium voltage interconnection, comprising the steps of: "providing a flexible tube [and] expanding radially said flexible tube and sliding therein said conductive core, including said two connectors inside said expanded flexible tube, and releasing said flexible tube over said conductive core to form an interconnection assembly."

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Pending independent claim 17 recites, in part, a method of providing a medium voltage interconnection, comprising the steps of: "providing a flexible tube [and] expanding said flexible tube and relatively sliding said conductive core, including at least said first electrical connector, inside said expanded flexible tube, and releasing said flexible tube over said conductive core to form an interconnection assembly."

Contrary to the language emphasized above in the quotation of the Examiner's rejection, Lichy does not teach, either expressly, inherently, or implicitly, the foregoing features in claims 1 and 17. To the contrary, one skilled in the art would be led away from adopting these method steps.

As set forth in the Manual Of Patent Examining Procedure ("MPEP") entitled, "EXAMINER MUST PROVIDE RATIONALE OR EVIDENCE TENDING TO SHOW INHERENCY":

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). "*To establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.*" *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted) . . . .

"In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to

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reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original) . . . .

MPEP Section 2112 (underlined emphasis in original). Applicant respectfully submits that the grounds of rejection do not satisfy the MPEP's requirements for establishing inherency.

Referring to Fig. 1a, Lichy discloses a connector 7 providing interconnection between a power cable and a medium-voltage equipment (*see* abstract). The connector 7 includes a connection device 5 that provides a connection to the medium-voltage equipment (*see* column 3, lines 47-50). The connector 7 also includes an angular elastic housing 3 and a conducting layer 13.

The angular housing 3 is made of two different parts, a first part 71 and a second part 72, that are integrated together (*see* column 4, lines 4-7). The first part 71 and second part 72 each has several layers (including a semiconductor inner layers 33 and 35, respectively). The first part 71 is clearly disclosed as a different part from the second part 72, since they have different thicknesses (*see, again*, column 4, lines 4-5).

The foregoing description makes clear that the connector of Lichy is entirely different from interconnection disclosed by the Applicant and the method of making an interconnection as recited in claims 1 and 17. In particular, Lichy does not disclose, or even suggest, an expanded tube that is released over a conductive core.

Keeping in mind that a tube is understood by the skilled artisan to be a hollow cylindrical body structure as shown, for example, in Figs. 2a and 2b of Applicant's disclosure, such a structure is not disclosed in Lichy. Rather, as noted above, Lichy discloses an angular housing 3

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made of two parts (first part 71 and second part 72) that have different thicknesses along its length and is, therefore, not a tube as one skilled in the art would understand. Both parts 71 and 72 have different layer structures and are integrated together. The housing 3 includes only partially semiconductive layers (layers 33 and 35) along its length, confirming the fact that the housing 3 is not a tube.

Moreover, Lichy is entirely silent with respect to the installation of the housing 3. This installation likely involves, for example, a molding step that is completely different from the installation steps of claims 1 and 17. One skilled in the art would not take away any inherency disclosure involving the expansion and release of tube as recited in Applicant's claims 1 and 17. Quite the contrary, based on the two part angular structure, one skilled in the art would, if anything, be led away from such a step.

Applicant notes that the method steps of expanding radially a flexible tube and releasing the flexible tube over the conductive core is an important feature, since it allows one to obtain a flexible interconnection available in different lengths without any significant increase in cost and in a very simple manner.

Pending independent claims 9, recites, in part, a medium voltage interconnection, comprising a flexible tube "placed over said conductive core by radially expanding said flexible tube, relatively sliding said conductive cone inside said flexible tube, and releasing said flexible tube over said conductive core." As explained above, Lichy does not disclose, either explicitly, inherently, or implicitly, such a flexible tube.

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In view of at least the foregoing distinctions, the Examiner is kindly requested to reconsider and withdraw the rejection of claims 1 and 17 and dependent claims 2, 8, 12, 18-21, 23, and 24.

**Claim Rejections - 35 USC 103**

Without agreeing or substantively commenting on the grounds of rejection of claims 10 and 11, Applicant submits that these claims are allowable at least by reason of their respective dependencies.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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